

Amendments to the Claims

This listing of claims will replace all prior versions, and listings, of claims in the application:

Listing of Claims:

1. (currently amended) A method for controlling engine operation in a vehicle, the engine coupled to an emission control device including at least platinum particles for converting emissions from the engine, the method comprising:

detecting a deceleration condition of the vehicle;

in response to said deceleration condition, **having combustion in at least one cylinder,**
and adjusting fuel injection into the engine to maintain an exhaust mixture air-fuel ratio entering the emission control device to be lean, but less lean than a limit air-fuel ratio value, said limit air-fuel ratio value being a lean air-fuel ratio limit determined as a function of exhaust temperature.

2. (original) The method recited in Claim 1 further comprising, adjusting an exhaust valve in an exhaust system of the engine to increase exhaust gas cooling.

3. (original) The method recited in Claim 1 wherein said limit air-fuel ratio decreases as temperature increases, at least in one operating region.

4. (original) The method recited in Claim 3 wherein said exhaust temperature includes temperature of the emission control device.

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5. (currently amended) The method recited in Claim 4 wherein ~~the exhaust includes a~~ second emission control device is coupled upstream of said emission control device.

6-15. (cancelled)

16. (currently amended) A method for controlling engine operation in a vehicle, the engine coupled to a first and second emission control device, the second emission control device including at least platinum particles for converting emissions from the engine, the method comprising:

detecting a deceleration condition of the vehicle;

determining temperature of ~~[[the]]~~ said second emission control device;

enabling fuel cut operation in at least one cylinder when said second device temperature is less than a first value during said detected deceleration condition;

disabling fuel cut operation in at least one cylinder when said second device temperature is greater than a second value; and

when said second device temperature is between said first value and said second value, limiting a lean engine air-fuel ratio to a lean limit value determined based on said second device temperature when an oxygen storage amount of said first emission control device has approached a storage capacity of said first emission control device, and enabling fuel cut operation or any lean air-fuel ratio when said oxygen storage amount of said first emission control device is below said storage capacity.

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17. (currently amended) A method for controlling engine operation in a vehicle, the engine coupled to a first and second emission control device, the second emission control device including at least platinum particles for converting emissions from the engine, the method comprising:

detecting a deceleration condition of the vehicle;

determining temperature of [[the]] said second emission control device;

enabling fuel cut operation in at least one cylinder while said second device temperature is less than a first value during said detected deceleration condition; and

enabling fuel cut operation for only a preselected period when said second device temperature is greater than a second value.

18. (original) The method recited in Claim 17 wherein said second value is equal to said first value.

19. (currently amended) The method recited in Claim 18 wherein said first value is based on exhaust air-fuel ratio entering or in said second emission control device.

20. (original) The method recited in Claim 17 wherein said preselected period include a time period.

21. (original) The method recited in Claim 17 wherein said preselected period include a number of engine cycles.

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22. (new) A method for controlling engine operation in a vehicle, the engine coupled to an emission control device including at least platinum particles for converting emissions from the engine, the method comprising:

detecting a deceleration condition of the vehicle;

in response to said deceleration condition, adjusting fuel injection into the engine to maintain an exhaust mixture air-fuel ratio entering the emission control device to be lean, but less lean than a limit air-fuel ratio value, said limit air-fuel ratio value being a lean air-fuel ratio limit determined as a function of exhaust temperature, wherein said limit air-fuel ratio decreases as temperature increases, at least in one operating region, wherein said exhaust temperature includes temperature of the emission control device, wherein a second emission control device is coupled upstream of said emission control device wherein said limit air-fuel ratio for said downstream emission control device is based on an amount of oxygen storage of said upstream emission control device.